



**TREND OF AYURVEDIC RESEARCH STUDIES ON *PANDU ROGA*
AND FUTURE GUIDELINES**

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ABSTRACT

Pandu, one of the most commonly selected topics of research in *Ayurveda*, mainly because of its highest incidence rate. This study was aimed at screening and analysing the research studies on *Pandu roga*. A total of 338 research works are found till date regarding this topic in Ayurveda. At the same time, a lot of repetitions are seen. Trend of studies denote the necessity in change of thinking while selection of the subject, its objective. Exploring the unexplored areas of research in *Pandu roga* is inevitable for the development and propagation of this science.

Keywords: *Pandu roga*, Research, Ayurveda

INTRODUCTION: Research studies in Ayurvedic post graduation has surpassed more than 50 years since its inception denote active participation of the young medicos in decoding the principles of Ayurveda.¹ *Pandu*, one of the most commonly selected topics of research in *Ayurveda*, mainly because of its highest incidence rate. At the same time, a lot of repetitions are seen. A total of 338 research works are found till date regarding this topic in Ayurveda. This paper intends to elaborate on the types of research works done in this area.

The ailment, *Pandu* is considered to be *santarapanotta, rasapradoshaja vyadhi* as per Ayurvedic doctrines.^{2,3} From dawn to dusk of an individual's life this condition haunts health status thus necessitates the therapeutical assistance. This metabolic condition suitably claims significant importance in all systems of medicine. Ayurveda system firmly believes that metabolism is imperative to health of an

individual and hence any derangement in metabolism is the prime factor for the pathological manifestation of an illness.

AIM & OBJECTIVE:

To screen and analyse the research studies conducted across India since the inception of Ayurvedic postgraduation studies.

MATERIALS & METHODS:

- Titles of the thesis are procured from 'Researches in Ayurveda'- A classified directory of PG & PhD research works carried out at various institutions throughout India, compiled by Prof. M.S.Baghel⁴ and also by personal communication with certain institution / faculty members.

OBSERVATIONS & DISCUSSION:

On screening the titles of research studies procured from across India the following observations are noted. A total of 338 research studies are reported across India on the subject studied across the diverse departments of Ayurveda among them department of *Kayachikitsa* topped with a

145 research studies while the least is from *Shalya* and *Sharira Kriya* department with one study each. Institute for Postgraduate teaching and Research in Ayurveda [IPGT &RA] reports to have highest number of studies conducted on the subject [n-33]. Except few negligible literary and analytical studies nearly a large number of studies were clinical type. Screening of the titles of the studies reveals the objective of them being assessment efficacy of textual

written prescriptions in comparison with that of standard drug, though very few attempts are targeted towards the pathological part of the illness [n-24]. 11 studies did not reveal the medicine used and titles of the several studies keeps the reader in ambiguity in learning the exact objective and method adopted.

The sources of drug used in the clinical studies are tabulated in Table No.01

Table No.1, depicting the source of drugs used in the research studies:

Sr. No	Source of Drug	Number of Studies
1	Animal Source	3
2	Herbal Origin	86
3	Herbo-mineral preparation	30
4	Mineral Preparations	41
5	Unclear	178

The number of studies with name of the preparation used for the therapeutical outcome is tabulated in Table No. Certain unusual studies are reported during the review process like one study has utilised *Gandoosha* [One form of oil pulling therapy] to treat the *Pandu vyadhi*. Use of goat's blood through enema is detailed in few types of *Pandu* disease and three studies reports to have worked upon it. A vast number of titles of studies fail to denote the nature, method and also type of study.

Shortcoming observed:

- Screening and analyzing the titles of research studies on *Pandu* the following shortcomings were detected.
- A mammoth number of research studies are targeted towards evaluating the drug effect on the *Pandu roga*.
- A meagre number of studies had worked on analysing the disease

pathology, assessment of clinical staging and validating clinical scales.

- It was also evident that huge numbers of clinical trials were directed towards just mere supplementing of iron which is dissimilar with the actual principle of Ayurveda.
- Even after such titanic number of studies, yet none of the studies attempted to provide standard protocol for the management of the disease.
- *Shamanoushadhi* are used in numerous studies while limited studies have tested the role of *shodhana chikitsa* in *Pandu roga*.
- Less number of survey studies was reported.

Guidelines for future studies:

- A disease presentation targeted studies are the need of the hour.
- Compilation of various modalities across contemporary systems of medicine in the treating *pandu roga*.

- Survey based studies in assessing the incidence, the pattern of clinical presentation, detecting the environmental and life style causes for its manifestation.
- Role of *prakruti*, *sara* in the management of *Pandu roga*
- Validation and preparation clinical diagnostic scales for enhanced clinical assessment
- Role of diet in the manifestation of the illness and its role in correcting the ailment.
- Studies to find the reasons for the recurrence and solution for the same
- Research studies directed towards complications of *Pandu*.
- *Upashaya* and *Anupashaya* of *Pandu roga*
- Dietary protocol based on geographical and environmental variation
- Role of health education in treating *Pandu roga*
- Socioeconomic impact of *Pandu roga* on an individual's health
- Quality of life of a patient suffering from *Pandu roga*

Table No.2, depicting the department wise studies on *Pandu roga*

<i>Kayachikitsa</i>	145
<i>Rasa shastra and Bhaishajya Kalpana</i>	61
<i>Striroga & Prasuti Tantra</i>	37
<i>Kaumarabhritya</i>	29
<i>Roga vignana and Vikruti Vignana</i>	24
<i>Ayurveda Samhita and Siddhanta</i>	15
<i>Dravyaguna</i>	14
<i>Panchakarma</i>	07
<i>Swasthavritta</i>	03
<i>Agada Tantra</i>	01
<i>Sharira Kriya</i>	01
<i>Shalya</i>	01
<i>TOTAL</i>	338

Table No.3, depicting Institution wise Number of research studies on *Pandu roga*:

Institution Name	Number of Research Works
Institute for Post Graduate Teaching & Research in Ayurveda, Gujarat Ayurved University, Jamnagar	33
Maharashtra University of Health Sciences, Nashik	26
National Institute of Ayurveda, Jaipur	18
Alva's Ayurvedic Medical College, Moodbidri	16
Dr BRKR Govt Ayurvedic College, Hyderabad	16
Rajiv Gandhi Govt. Post-Graduate Ayurvedic College, Paprola	12
Government Ayurved College, Patiala	11
Shri Ayurved Mahavidyalaya, Nagpur	11
Tilak Ayurved Mahavidyalaya, Pune	11
Faculty of Ayurveda, Institute of Medical Sciences Banaras Hindu University, Varanasi.	10
Govt. Ayurveda College, Trivendrum	10
Bharti Vidyapeeth's University, College of Ayurved, Pune, Maharashtra	9

Govt. Ayurveda Medical College & Hospital, Mysore	8
Sri Dharmasthala Manjunatheshwara College Of Ayurveda And Hospital, Kuthpady, Udupi	8
Govt. Akhandanand Ayurved College & Hospital, Ahmedabad	7
MMM Govt. Ayurved College, Udaipur	7
State Ayurvedic College & Hospital, Lukcnaw	7
SMBT Ayurved College & Hospital, Igatpuri, Nashik	6
Aroor Laxminarayana Rao Memorial Ayurvedic Medical College, Koppa	5
Gopabandhu Ayurveda Mahavidyalaya, Puri	5
Institute of Post Graduate Ayurvedic Education & Research, Kolkata	5
Rajiv Gandhi University Of Health Sciences, Karnataka	5
Ashwini Ayurvedic Medical College, Davanagere	4
Government Ayurvedic College & Hospital, Patna	4
Government Ayurvedic Medical College, Bangalore	4
Shri Jagadguru Gurusiddeshwar Co - Operative Hospital And Research Institute (Shri J G C H Society), Ghataprabha	4
Shri Narayan Prasad Awathy Government Ayurved College, Raipur	4
Sri Dharmasthala Manjunatheshwara College Of Ayurveda And Hospital, Hassan	4
Ayurved Mahavidyalaya & Hospital, Hubli	3
Bhagwan Mahaveer Jain Ayurvedic Medical College, Gajendragad	3
College of Ayurved & Research Centre, Akurdi, Pune, Maharashtra	3
Government Ayurved College, Nanded	3
Government Ayurvedic College, Guwahati	3
R.A. Podar Ayurved Medical College, Mumbai	3
Shri D G Melmalagi Ayurvedic Medical College & Hospital, Gadag	3
Smt. Kamaladevi Gauridutt Mittal Puanrvasu Ayurved Mahavidyalaya, Mumbai	3
C.S.M.S.S. Ayurved College, Kanchanwadi, Aurangabad,Maharashtra	2
Dr NTR University of Health Sciences, Andhra Pradesh	2
Govt. Ayurvedic College, Nagpur	2
Govt. Dhanwantri Ayurvedic College & Hospital, Ujjain	2
K V G Ayurveda Medical College & Hospital, Sullia	2
KLEUS Shri B.M. Kankanawadi Ayurveda Mahavidyalaya, Belgaum	2
N K Jabshetty Ayurvedic Medical College And PG Centre,Bidar	2
Poona District Education Association's, College of Ayurved & Research Centre, Pune	2
Sri Kalabyreshwara Swamy Ayurvedic Medical College Hsopital & Research Centre, Bangalore	2
Basavaraj Nagur Memorial Rural Ayurvedic Medical College And Hospital (B N M R), Bijapur	1
BSD Trust's Ayurved Mahavidyalaya, Wagholi, Pune, Maharashtra	1
Dr NR Shastry Govt. Ayurvedic College, Vijayawada	1
Dr. Basavaraj Nagur Memorial Rural Ayurvedic Medical College And Hospital (Dr. B N M R), Bijapur	1
Govt. (Auto) Ayurved College, Rewa	1
Govt. Auto Ayurved College & Hospital, Gwalior	1
Gramin Ayurvedic Mahavidyalaya, Patur, Akola, Maharashtra	1

J S S Ayurveda Medical College, Mysore	1
JSVV Samsthe's Danappa Gurushiddappa Melmalagi Ayurvedic Medical College & Hospital, Gadag	1
Maharashtra Arogya Mandal's Sumati Bhai Shah Ayurved Mahavidyalaya, Hadapsar	1
MAM's Sumatibhai Shah Ayurved Mahavidyalaya, Hadapsar, Pune, Maharashtra	1
Muniyal Institute of Ayurveda Medical Sciences, Manipal	1
Pdmashree Dr. D. Y. Patil College of Ayurved and Research Centre, Pimpri, Pune, Maharashtra	1
Ph D Thesis . Rajasthan Ayurved University, Jodhpur	1
Postgraduate Institute of Ayurved, Chitrakoot	1
Pravara Medical Trust's, Ayurved College and Shri Eknath Ayurved Rugnalaya, Shevgaon, Ahmednagar, Maharashtra	1
Rishikul Govt P.G. Ayurvedic College & Hospital, Haridwar	1
Sangam Sevabhavi Trust's Ayurved College, Sangamner, Ahmednagar, Maharashtra	1
Seth Govindji Raoji Ayurved College, Sholapur	1
Shri Radhakisan Toshniwal Ayurved Mahavidyalaya, Akola	1
Shri Radhakisan Toshniwal Ayurved Mahavidyalaya, Akola	1
Siddhakala Ayurved College, Sangamner, Maharashtra	1
Sri Jagadguru Gavisiddeswar Ayurvedic Medical College, Koppal	1
Sv M V V Sangha`S Shri Vijay Mahantehs Ayurvedic Medical College, Ilkal	1
Taranath Govt. Ayurvedic Medical College, Bellary	1
Vidarbha Ayurved College, Amravati, Maharashtra	1
Total	338

Table No.4, depicting formulations used in the research studies:

Formulation	n	
Diagnostic – No medicine	24	<i>Abhrak Bhasma</i>
<i>Kaseesa [Shuddha Kaseesa]</i>	16	<i>Triyushanadi Mandoor</i>
<i>Lauha Bhasma</i>	14	<i>Yogaraj Rasa</i>
<i>Navayasa Lauha</i>	14	<i>Yogaraja Rasayana</i>
<i>Dhatri Lauha</i>	14	<i>Amalaki</i>
Not mentioned	11	<i>Amalaki Churna</i>
<i>Guda Haritaki</i>	10	<i>Drakshadi Avaleha</i>
<i>Nisha Loham</i>	8	<i>Indigenous Compound</i>
<i>Mandoora Gutika</i>	7	<i>Kaseesa Bhasma</i>
<i>Punarnava Mandoora</i>	7	<i>Literary</i>
<i>Vidangadi Lauha</i>	7	<i>Lohasava</i>
<i>Gomootra-Haritaki</i>	6	<i>Mustatriphaladi Avaleha</i>
<i>Mandoora Bhasma</i>	6	<i>Pandughni Vati</i>
<i>Svarna-Makshika Bhasma</i>	6	<i>Punarnava</i>
<i>Virechana Karma</i>	6	<i>Punarnavadi Mandoor</i>
<i>Amalaki Avaleha</i>	5	<i>Svarna-Makshika Yoga</i>
<i>Dadimadi Ghrita</i>	5	<i>Tapyadi Loha</i>
<i>Dhatryarishta</i>	5	<i>Amalaki Rasayana</i>
<i>Phalatrikadi Kwatha</i>	5	<i>Navayasa Choorna</i>
		<i>Aja- Shonita</i>
		2

<i>Bibheetakyadi Vataka</i>	2	<i>Bimbi (Coccinia Indica, W & A)</i>	1
<i>Chinchadi Leha</i>	2	<i>Cap. Fefol</i>	1
<i>Darvyadi leha</i>	2	<i>Chitraka (Plumbago Rosea Linn)</i>	1
<i>Darvyadiloham</i>	2	<i>Compound Of Gomedha-Mandoora-Kaseesa Bhasma</i>	1
<i>Dhatriavaleha</i>	2	<i>Dadima Ghrita</i>	1
<i>Draksha Ghrita</i>	2	<i>Danti Ghrita</i>	1
<i>Gaudarishta</i>	2	<i>Daruhaladi Choorna</i>	1
<i>Gudadi Mandoor</i>	2	<i>Dhanyak Patra Swaras</i>	1
<i>Haridra Choorna</i>	2	<i>Dhatri Compound</i>	1
<i>Kokilakasha (Hygrophila Spinosa)</i>	2	<i>Dhatriphala Rasa</i>	1
<i>Lohamrut</i>	2	<i>Draksha- Dadimadi Syrup</i>	1
<i>Mandoora Kalpana</i>	2	<i>Dwipanchmuladi Kasaya Basti</i>	1
<i>Mandoora Lavana</i>	2	<i>Ferrous Sulphate</i>	1
<i>Mandooradi Yoga</i>	2	<i>Ferrous Sulphate</i>	1
<i>Mustadi Choorna</i>	2	<i>Ferrous Sulphate – Folic Acid</i>	1
<i>Navajeevana Rasa</i>	2	<i>Gandeera Rasayana</i>	1
<i>Navayas Lauha</i>	2	<i>Gandhakadi Yoga</i>	1
<i>Panduhara Yoga</i>	2	<i>Ghrita Chikitsa</i>	1
<i>Pathya Ghrita</i>	2	<i>Godanti Bhasma</i>	1
<i>Phalatrikadi Kwatha Ghana Vati</i>	2	<i>Gomedha Bhasma</i>	1
<i>Pippali</i>	2	<i>Gomutra Gairik Vati</i>	1
<i>Raktavardaka Yoga</i>	2	<i>Guda Pippali</i>	1
<i>Sammoha Loha</i>	2	<i>Gudanagaradi Vati</i>	1
<i>Saptamruta Loha</i>	2	<i>Gudashtaka Yoga</i>	1
<i>Satavari Mandura</i>	2	<i>Gudmanduradi Gutika</i>	1
<i>Shamana sneha</i>	2	<i>Guduchi</i>	1
<i>Shilajitvadi Lauha</i>	2	<i>Guduchi Satva</i>	1
<i>Survey study</i>	2	<i>Hansa Mandura</i>	1
<i>Triphaladi Avaleha</i>	2	<i>Hareetaki</i>	1
<i>Vyoshadi Ghrita</i>	2	<i>Haritaki-Loharaj Yog</i>	1
<i>Yashada Bhasma</i>	2	<i>Indrashani Choorna</i>	1
<i>Yashtimadhu</i>	2	<i>Irimedadi Taila Gandoosha</i>	1
<i>Rakta-Basti</i>	2	<i>Kalyanaka Ghrita.</i>	1
<i>Shilajatu Rasayana</i>	2	<i>Kamadudha Rasa(1 -2)</i>	1
<i>Aja-Yakrit Extract (Goat Liver)</i>	1	<i>Kautajatriphaladi Lehya</i>	1
<i>Amlakyadi Choornam</i>	1	<i>Kayyanyadi Choorna</i>	1
<i>Amritarnava Rasa</i>	1	<i>Kesaradi Ghrit</i>	1
<i>Ashtadashanga Kvatha</i>	1	<i>Kesha-Ranjaka Dravyon</i>	1
<i>Ashta-Dashanga Loha</i>	1	<i>Kharjoorasava</i>	1
<i>Ayasa-Tiladi Yoga</i>	1	<i>Kokilaksha Mandoora Vataka</i>	1
<i>Ayastiladi Modak</i>	1	<i>Koutajadi Gutika</i>	1
<i>Ayorajovyoshadi Yoga</i>	1	<i>Loha</i>	1
<i>Bhaskara Lavana Churna</i>	1	<i>Loha – Haritaki – Haridra Yog</i>	1
<i>Bhavita-Dhatri-Pippali</i>	1		
<i>Bibhitaka Vataka</i>	1		
<i>Bibhitakadi Mandur Vati</i>	1		

<i>Loha Kalpa</i>	1
<i>Loha Parpati</i>	1
<i>Louha Vatakam</i>	1
<i>Madhumakshikadi Vati</i>	1
<i>Makshika</i>	1
<i>Mandooradi Ghana-Vati</i>	1
<i>Mandoorarishta</i>	1
<i>Mulaka (Raphanus sativus Linn)</i> <i>Swarasa</i>	1
<i>Murvadi Churna</i>	1
<i>Nagaradi Vati</i>	1
<i>Paradamruta Teekshna Lauha</i>	1
<i>Pathyadi Gutika</i>	1
<i>Pathyaghrut</i>	1
<i>Patola Panchanga Churna</i> (<i>Tricosanthes Dioica Roxb</i>)	1
<i>Paunarnava</i>	1
<i>Pranada Gutika</i>	1
<i>Pushparaga Avlehya</i>	1
<i>Raktamita arka</i>	1
<i>Rasna-Panchaka Kashaya</i>	1
<i>Saha Ayasadhi Yogam</i>	1
<i>Shddha Gairik</i>	1
<i>Shigru Patra Swaras</i>	1

<i>Swarna Makshika Bhasma</i>	1
<i>Takra Mandoora</i>	1
<i>Talisadi Churna</i>	1
<i>Tamra Bhasma</i>	1
<i>Tanduliyaka</i>	1
<i>Taramandura guda</i>	1
<i>Trikatravadi Lauha</i>	1
<i>Triphala Kashay</i>	1
<i>Triphaladi Prayogam</i>	1
<i>Triphaladya Avalehya</i>	1
<i>Triphala-Mandoora Yoga</i>	1
<i>Vaikranta</i>	1
<i>Vajra-Vataka Mandoora</i>	1
<i>Vamana Karma</i>	1
<i>Vardhamana Pippali Kalka</i>	1
<i>Vibheetakadi Vataka</i>	1
<i>Vimala Bhasma Prepared With Gandhak Media</i>	1
<i>Vishaladi Phanta</i>	1
<i>Vyoshadhi Kashaya</i>	1
<i>Vyoshadi Choorna</i>	1
<i>Vyoshadi Takra</i>	1
<i>Vyoshadi Vati</i>	1

n- Number of studies

CONCLUSION: *Pandu roga* is very frequently studied topic in post graduate research on screening the titles of the studies revealed a mammoth number of trials were reported from across India. Trend of studies denote the necessity in

change of thinking while selection of the subject, its objective. Exploring the unexplored areas of research in *Pandu roga* is inevitable for the development and propagation of this science.

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